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ECONOMICS, STATISTICS AND FISCAL ANALYSIS DIVISION

ECONOMIC TRENDS

# THE IMPORTANCE OF EQUALIZATION TO PRINCE EDWARD ISLAND

## 1. Introduction

Equalization payments are made by the Federal Government to Provincial Governments to allow each Province to sustain reasonably comparable levels of services and taxes. For P.E.I. these payments in 1981-82 amounted to $113.8 million or approximately one-third of all ordinary revenues of the Government of Prince Edward Island. Equalization is easily the largest single revenue source for the Government of Prince Edward Island, dominating both own source revenues as well as transfer payments to the Province. In 1981-82 payments under Equalization were equivalent to 91 per cent of the value of all provincial taxes paid on Prince Edward Island and represented approximately two-thirds of the value of all federal transfers to the provincial government that year.

In Table 1 is displayed the value of Equalization entitlements of each Province in total, on a per capita basis, and as a proportion of each Province's Gross Domestic Product. One can see that the $864 per capita paid to Prince Edward Island was considerably more than other Provinces. In addition, Equalization payments as a proportion of provincial Gross Domestic Product measured 12 per cent in P.E.I., the highest in Canada. Thus by these measures it can be seen that P.E.I. depends on Equalization more than any other Province in Canada. Yet by far the bulk of total Equalization entitlements of $4.3 billion actually go to the Province of Quebec because of its large population.

The principle of making Equalization payments to the Provinces is now enshrined in the Canadian Constitution although its precise form is subject to change. The Equalization formula actually underwent extensive alterations in 1982 but it appears that the founding principles behind Equalization are not likely to be altered.

Table 1

Equalization Entitlements

1981-82 Sixth Estimate

| | Total Entitlements $ million | Per Capita Amounts $ | Equalization as a % of GDP |
|---|---|---|---|
| Newfoundland | 431.1 | 759 | 10.3 |
| Prince Edward Island | 105.9 | 864 | 12.1 |
| Nova Scotia | 521.9 | 616 | 7.1 |
| New Brunswick | 441.0 | 633 | 7.1 |
| Quebec | 2,451.1 | 381 | 3.1 |
| Ontario | 0.0 | 0 | 0.0 |
| Manitoba | 398.8 | 389 | 3.1 |
| Saskatchewan | 0.0 | 0 | 0.0 |
| Alberta | 0.0 | 0 | 0.0 |
| British Columbia | 0.0 | 0 | 0.0 |
| Total All Provinces | 4,349.7 | 179 | 1.3 |
| Total Equalization Receiving Provinces | 4,349.7 | 448 | 4.0 |

This paper attempts to outline how payments are determined and to provide an historical perspective on the development of this important transfer payment for Prince Edward Island. In addition, the paper will examine some of the implications of the Equalization formula as it affects the Province.

A discussion of Equalization lies very much at the heart of concerns over dependence on federal transfers by the Province. In fact, an understanding of Equalization is key to understanding why P.E.I. has such a degree of dependence on the Federal Government. The path that leads one away from federal dependence is very much the same path that reduces the Province's need for Equalization.

## 2. The Equalization Formula

The idea behind Equalization as stated in the Canadian Constitution is

> "that Provincial Governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation."

How this is done in practice is defined very precisely in federal legislation under the Fiscal Arrangements Act, which is amended every five years, the present Act extending from 1982-83 to 1986-87. The Equalization Formulae have all endeavoured to define revenue deficiencies in order to determine the payments by the Federal Government to those Provinces in need, although they have differed considerable in terms of their scope and the standard by which a deficiency in a given revenue source is defined.

Before proceeding we should clarify some basic points. The taxes or revenues that are equalized are provincial revenue sources covering most commonly utilized provincial revenues from taxes and other revenue sources. The actual payment of Equalization is made by the Federal Department of Finance from their general revenues. Equalization only adds to provincial revenues to make up deficiences, and there is no element of withholding funds from better off Provinces such as Alberta. As could be seen in Table 1, Alberta simply receives no Equalization.

The estimation of revenue deficiences turns on the estimation of deficiences in the revenue bases of each Province and not actual tax collections. The revenue bases refer to such measures as the level of taxable income, or the value of retail sales, the volume of alcohol sold, etc., with different bases defined for each particular revenue source to be equalized. The formula has been developed without utilizing the actual tax bases of the Provinces, thus avoiding the acute problem of comparability between Provinces. In addition the measurement of deficiency is made quite independently of the Provinces' actual tax collection practices. The "representative tax system", as it is called, attempts to quantify in a standard way the critical aspects influencing the capability of all Provinces to generate revenue.

The present formula equalizes 34 different provincial revenue sources, the more important ones being the Provincial Personal and Corporate Income Taxes, Sales Tax, Property Tax, and Resource Revenues. The standard which is presently used to determine a revenue deficiency is predicated on the per capita revenue base of 5 Provinces, that is all Provinces except those of Atlantic Canada and the Province of Alberta. Each revenue source is examined separately and the deficiency is determined by the difference between the average revenue base per capita for the 5 Provinces and the revenue base per capita for P.E.I. for that particular revenue source. If for example

we find that the total retail sales per capita for the 5 Provinces was $10,000, but for P.E.I. it was only $6,000, then we have a deficiency in this revenue base for sales tax of $4,000 per person.

Knowing the deficiency in the base still does not provide an estimate of Equalization, because we must apply some rate of tax to the base to find the actual tax deficiency. The present formula takes the average rate of tax for a particular revenue source per unit of the particular revenue base being used, for all Provinces, and applies that rate to the deficiency in the base. Having determined the revenue deficiency for a particular source on a per capita basis, the formula simply multiples that by the population of the Province in that year, to determine the total revenue deficiency for the Province in that source.

The actual calculation of Equalization for P.E.I. in 1979-80 is shown in Table 2. Under the formula at that time there were 29 revenue sources to be equalized. The total in Column 3; $80,810,000, was the provincial equalization entitlement for that year and this sum was paid to the Province by the Federal Government. Column 1 identifies the estimated revenue from each tax source that P.E.I. would have been able to generate, if it had had the national per capita average revenue base for each of those sources, and if it had applied the average rate of tax against those revenue bases calculated for all provinces in 1979-80. Column 1 thus represents the standard in that year, which, on a per capita basis, was the same for each Province. Column 2 represents the amount of revenue that the Province could have generated at national average tax rates, given P.E.I.'s revenue bases. Column 3 is the Equalization Entitlement for each revenue source and is the difference between Columns 1 and 2.

There are several points which can be seen in examining Table 2. Firstly it is apparent that in this calculation the actual tax collections of the Province are not involved in the formula, except to the extent that all provincial revenues are used to calculate the average tax rates. Secondly, the formula provides significant revenues for several provincial revenue sources which are totally non-existent in Prince Edward Island, such as Oil and Gas revenues. In such cases the Province receives 100 per cent of the national per capita revenues to be equalized. Thirdly, there are some revenue sources in the Equalization formula for which there is an identifiable base in Prince Edward Island, but which the Province actually does not tax at all, for example Health Insurance premiums. Finally, it can be seen that the formula

Table 2

Calculation of Equalization Entitlements to P.E.I.

1979/80, by Revenue Source

($000)

| | | Revenue Yield Per Capita at National Average Rates times P.E.I.'s Population | | Equalization Entitlement |
|---|---|---|---|---|
| | | All Provinces | P.E.I. | |
| 1. | Personal Income Tax | 54,763 | 28,277 | 26,486 |
| 2. | Business Income Revs. | 15,253 | 5,581 | 9,672 |
| 3. | General Sales Tax | 31,323 | 21,354 | 9,969 |
| 4. | Tobacco Tax | 3,608 | 3,244 | 364 |
| 5. | Gasoline Tax | 7,290 | 7,259 | 31 |
| 6. | Diesel Fuel Tax | 1,739 | 565 | 1,174 |
| 7. | Non-Comm. Vehicle Licenses | 3,428 | 3,143 | 285 |
| 8. | Commercial Vehicle Licenses | 2,475 | 1,694 | 781 |
| 9. | Revenues from Sale of Spirits | 4,761 | 5,359 | -597 |
| 10. | Revenues from Sale of Wine | 1,082 | 504 | 578 |
| 11. | Revenues from Sale of Beer | 1,773 | 1,505 | 268 |
| 12. | Hospital Medical Insurance Prem. | 6,597 | 6,031 | 566 |
| 13. | Succession Duties/Gift Taxes | 484 | 180 | 304 |
| 14. | Race Track Taxes | 540 | 401 | 139 |
| 15. | Forestry Revenues | 3,850 | 0 | 3,850 |
| 16. | Crown Oil Revenues | 5,770 | 0 | 5,770 |
| 17. | Freehold Oil Revenues | 319 | 0 | 319 |
| 18. | Crown Gas Revenues | 4,544 | 0 | 4,544 |
| 19. | Freehold Gas Revenues | 125 | 0 | 125 |
| 20. | Sales of Crown Leases | 1,701 | 0 | 1,701 |
| 21. | Other Oil & Gas Revenues | 316 | 0 | 316 |
| 22. | Mineral Revenues | 1,187 | 0 | 1,187 |
| 23. | Water Power Rentals | 313 | 0 | 313 |
| 24. | Insurance Premium Taxes | 1,192 | 832 | 361 |
| 25. | Payroll Taxes | 2,714 | 1,538 | 1,176 |
| 26. | Property School Taxes | 19,924 | 13,212 | 6,713 |
| 27. | Lottery Revenues | 1,230 | 871 | 359 |
| 28. | Miscellaneous | 9,356 | 5,301 | 4,055 |
| 29. | Shared Tax on Undist. Inc. | 83 | 82 | 1 |
| | TOTAL | 187,743 | 106,933 | 80,810 |

NOTE: - The equalization entitlement in Column 3 is the difference between the amounts shown in Columns 1 and 2.

generated negative Equalization in 1979/80 in the case of revenues from the sale of Spirits. This situation arises where the provincial revenue base per capita is greater than the standard and in such cases Equalization is actually reduced.

The Equalization formula directly measures deficiencies in the revenue generating capability of the Provinces in terms of the "representative tax system", and therefore attacks directly the inequalities that exist for Provinces across Canada.

## 3. Development of the Formula

The principle that the Federal Government should make payments to the less privileged Provinces had very practical beginnings, when during the 1930's several Provinces were in extreme financial straits, Alberta being forced to default on its debts. Temporary federal assistance was supplied following this period. The Rowell-Sirois Commission of 1937 recommended that National Adjustment Grants be made by the Federal Government on a continuing basis to permit Provinces to maintain services at reasonable tax rates.

During the Second World War, and up to 1957, the federal government entered into Tax Rental Agreements with the Provinces in compensation for the Provinces' withdrawal from taxation of incomes and estates. The rental payments were equal per capita across the country and so formed a type of Equalization. Prime Minister Louis St. Laurent in 1955 stated

> "the objective of the Tax Rental Agreement is to make it financially possible for all Provinces, whatever their tax base, to perform their constitutional functions themselves and to provide a reasonable Canadian level of provincial services without an abnormal burden of taxation".

After 1957 the practice of making equal payments was stopped, and the Equalization of Personal and Corporate Income Taxes together with Succession Duties was made explicitly as a federal program. In those days the standard that was used was the average per capita tax yield of the top two Provinces in the country. In addition the federal government began making Atlantic Provinces Adjustment Grants to the Atlantic Region in view of their continuing low fiscal capacity.

In 1962, 50 per cent of the value of natural resource revenues were introduced into the formula, and the average per capita yield of all Provinces was used as the standard, replacing that of the top two. It was not until 1967 that the Equalization Formula was accepted as a mechanism for compensating Provinces for comprehensive revenue deficiencies across a wide spectrum of revenue sources. The Atlantic Provinces Adjustment Grant was dropped at that point, and 16 revenue sources were included in the formula, comprising the vast majority of Provinces' revenues. In 1973 the formula was extended to include school taxes, and this was the first time that Local Government revenues were included as an element of Equalization. In 1974 the formula was explicitly altered to prevent a rapid escalation in Equalization payments to all Provinces from major increases in oil and gas royalties in the producing Provinces. Only one-third of any energy revenues above the 1973/74 level were to be incorporated in the formula to prevent this escalation. Concern by the federal government about the impact of non-renewable resource revenues on Equalization payments has plagued the formula since that period.

In 1977 the number of revenue sources was increased to 29 by sub-dividing and redefining existing sources. Also 50 per cent of revenues from non-renewable resources was made eligible, but Equalization entitlements derived from such sources were limited to one-third of the total, in order to cap potential acceleration in payments due to the presence of oil and gas royalties in the formula.

The continuing concern over the impact of Oil and Gas prices led the federal government in 1981 to propose that Ontario should be used as the standard. After considerable discussion, the 5 Province standard, as described previously, was implemented in 1982. The major effect of this standard has been to eliminate Alberta's revenue capacity from the formula. In addition, two new revenue sources were introduced and there were further redefinitions of existing sources taking the total to 34. Other new features implemented included transitional payments, and a floor and ceiling on growth of revenues under the new formula.

The present formula can be simply stated as:

EXISTING EQUALIZATION FORMULA AT PRESENT

Equalization Payment to P.E.I. for a given Revenue Source = Average Canadian Tax Rate for that Source X P.E.I.'s Deficiency in the Revenue Base, for that Source

Where P.E.I.'s Deficiency = Population P.E.I. X [Per capita Revenue Base of 5 Province Standard − Per capita Revenue Base of P.E.I.]

And where, Average Canadian Tax Rate for that Source = Total Revenue Collections of All Provinces from that Source / Total Revenue Base for that Source

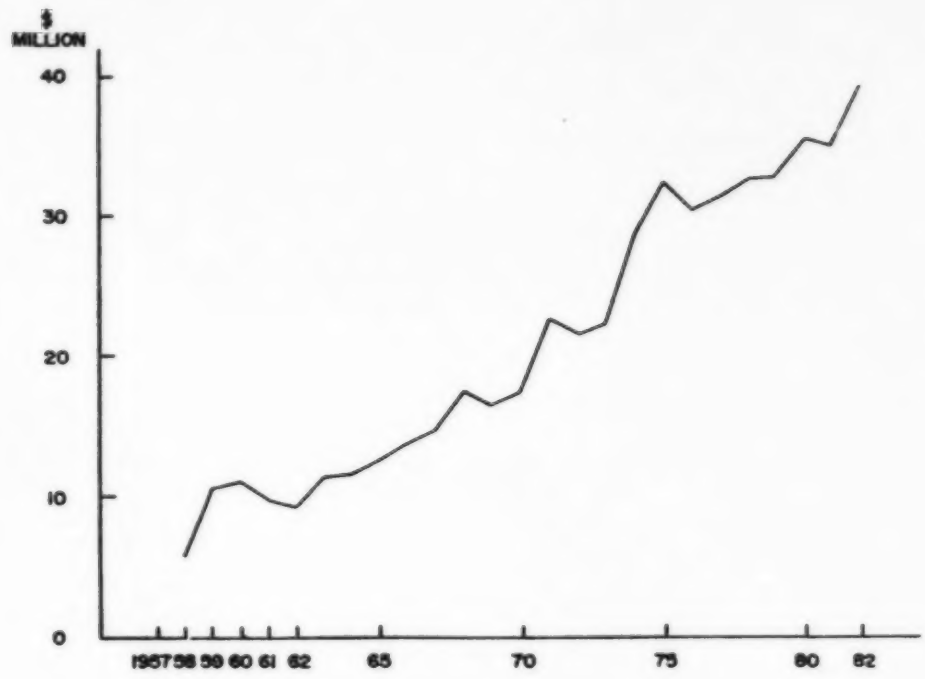
The 5 Provinces are Quebec, Ontario, Manitoba, Saskatchewan and British Columbia; the revenue sources cover 34 different revenues; and the revenue bases are calculated by the federal government from data which form the "representative tax system".

A further significant aspect of the new formula is that is has now moved further into the Local Government field as municipal property taxes and sales of goods and services are also equalized.

## 4. The Dynamics of Equalization

The Equalization formula is extremely sensitive to the economic circumstances of any Province relative to other Provinces in view of the way deficiences are defined. In itself therefore it has very dynamic properties. In addition the various changes that have been introduced to the formula over the years have resulted in considerable variation over time. For P.E.I. the Equalization program has produced a general trend of increased payments since its inception in 1957. The value of these payments to P.E.I. in constant dollars is displayed in Diagram 1.

Diagram 1



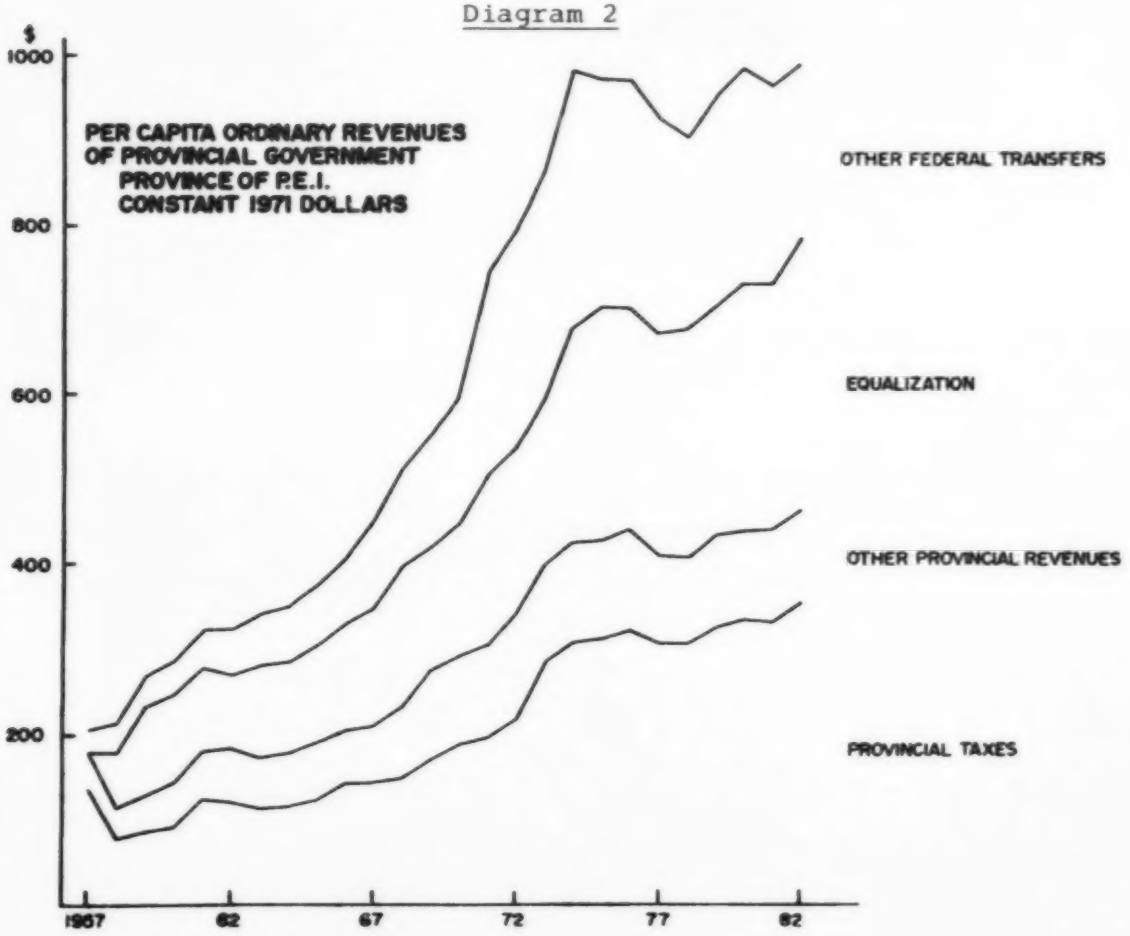

EQUALIZATION PAYMENTS TO P.E.I.
CONSTANT 1971 $, 1957/58 - 1981/82

In 1957/58, Equalization payments to P.E.I. were $3.1 million, which represented 28.3 per cent of total ordinary revenues in that year. By 1981/82 they amounted to $113.8 million or 32.4 per cent of ordinary revenues. In constant dollars, Equalization for P.E.I. increased by an average 8.5 per cent per year between 1957/58 and 1981/82.

The major factor at work to produce this rapid expansion of Equalization for the Province was the general expansion of Provincial revenues across Canada during this period, coupled with the extension of the definition of Equalization into areas where P.E.I. had significant deficiencies. Increases in Equalization for P.E.I. were distinctly not the result of a relative deterioration in the Province's economic situation, as per capita personal income increased from approximately 55 per cent of the national average in the early 50's to approximately 70 per cent in the late 70's. As Provincial revenues across Canada expanded in this period so the Equalization formulae permitted P.E.I. to share in this growth.

In Diagram 2 are displayed the ordinary revenues of the P.E.I. Government in constant dollars on a per capita basis since 1957. This Diagram clearly demonstrates the large increase in Equalization that occurred from the late 50's to the present. In 1961-62, for every dollar of own source revenues earned on P.E.I. the Province received 47¢ of Equalization. By 1980-81 Equalization was worth 64¢ for each dollar of our own source revenues. Equally important, the total revenues of the Government of P.E.I. have been increasingly squeezed since 1975 because of the reduction in constant dollars in "other federal transfers", notably under the P.E.I. Comprehensive Development Plan. Equalization has continued to make a major contribution to provincial revenues throughout the period.

Diagram 2



Despite the restrictions placed on resource revenues, the development of the Equalization Formula has generally been of assistance to P.E.I. Yet while the formula has clearly been of financial benefit to the Government of Prince Edward Island, it is evident that it has significantly increased the dependence of the Province on the Federal Government. The Equalization formula itself provides clues on how such federal dependence can be reduced. Clearly Equalization per capita will fall as the revenue bases per capita in this Province rise in relationship to the 5 Provinces now used as a standard.

Present deficiencies can be classified into two general groups; those deficiences arising from income or economic disadvantage, such as income tax, sales tax, property tax, etc.; and those deficiences arising from resource inadequacies, such as oil and gas royalties, forestry revenues, etc. In 1979/80 approximately 78 per cent of the Equalization received by the Province was due to income deficiencies while the remaining 22 per cent was the result of resource deficiencies. Thus for at least 78 per cent of the Equalization received by P.E.I., one can see that revenue deficiency should be reduced as per capita incomes rise to the 5 Province standard.

A further dynamic element of the Equalization formula should also be mentioned, and that arises from population growth itself. Equalization grows as population grows in proportion to the per capita average revenue bases in the standard. It falls as the Province's own revenue base rises with economic activity. Thus total population growth is critical to the total Provincial entitlement to Equalization. Generally speaking, if there is significant population growth in Prince Edward Island without a corresponding increase in per capita incomes relative to the standard, then dependence on Equalization can increase.

Clearly the goal of economic development is to improve standards of living through improved employment opportunities and earned incomes. In general these are consistent with the goal of reducing Equalization dependence. Population growth without economic improvement increases Equalization dependence.

## 5. Conclusions

The Province of Prince Edward Island is more dependent on Equalization than any other Province in Canada. It is hoped that this paper provides a basis for an improved understanding of this fact. The Equalization program is based on a complicated formula, but it is founded on a simple concept; the need to allow all Provinces comparable revenue generating capacity,

so that all Canadians can expect a reasonable level of provincial services everywhere in Canada.

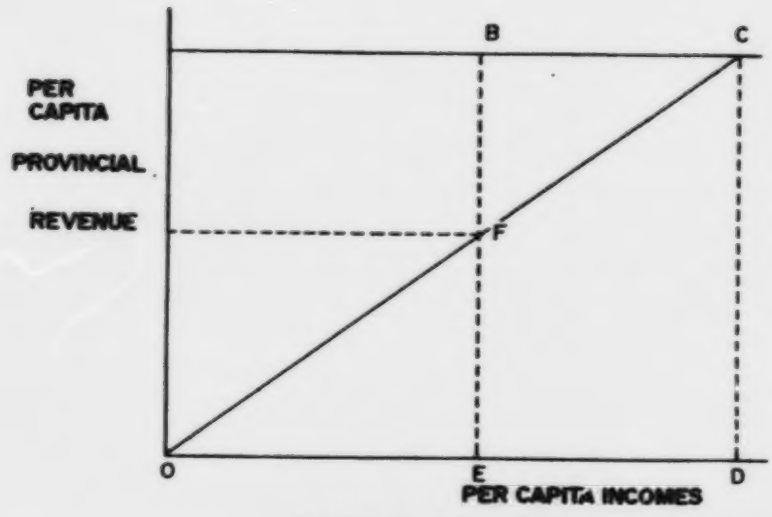
Concerns over the degree of dependence of the Province on Equalization should be directed to the reasons for our revenue deficiences rather than the program itself. Yet while the purpose of the Equalization program is difficult to criticize, it can present some very real practical problems.

The application of the formula requires accurate monitoring of provincial revenues from all 34 sources on an on-going bases. It also requires statistical manipulation of a vast array of variables to measure the revenue bases of each Province for each of the 34 revenue sources. This data base is subject to significant revisions for up to two years after the close of the fiscal year, and consequently the actual payments of Equalization are subject to significant prior years' adjustments. Furthermore the formula is extremely sensitive to changes in data, which means that statistical revisions can produce significant changes in entitlements. Payments of entitlements in any given year are based on forecasts of economic conditions in each Province and their effect upon each revenue source. Small adjustments to the forecast assumptions can result in major changes to the calculation of Equalization. These are very practical problems, and they effect P.E.I. greatly given the size of the payments to the Province. In particular they make accurate forecasting of Equalization revenues very difficult.

A more general problem is that in some ways Equalization works too well. The formula compensates for revenue deficiencies as revenue bases per capita fall below the national standard, but it also subtracts equally in the reverse direction as improvements in the revenue base per capita occur. In the case of the P.E.I. Government, as revenue bases improve, for each additional dollar in tax revenues received, we lose approximately 95 cents in Equalization payments. In the case of some revenue sources the Province actually loses more in Equalization than it can gain in its own source revenues, as the base improves relative to the national standard. Generally speaking Provincial finances in total are not likely to improve significantly, if steps to reduce Equalization and federal dependence are at all successful.

This situation is portrayed in Diagram 3 in a very simplified form. The Diagram ignores various forms of provincial revenues which fall entirely outside the Equalization formula, such as federal transfers under the Development Plan. It also ignores Equalization payments arising from resource deficiencies. The

Diagram 3




SCHEMATIC REPRESENTATION OF IMPACT OF IMPROVED INCOMES PER CAPITA ON PROVINCIAL REVENUES

Province could be described as being at position E on the horizontal axis, receiving approximately E to F in its own source revenues and F to B in Equalization payments, per capita. As per capita incomes move toward position D, the "standard", so own source revenues climb along the line F to C. However this induces a reduction in the line B to F, as Equalization falls, and so total revenues would actually only increase from EB to DC, which is extremely slight. Clearly the provincial financial situation in total is altered by very little as the development of the provincial economy progresses. This result accentuates the need to pursue policies of raising the level of earned incomes for its own sake, rather than for the sake of improving our Provincial finances. It also makes it very apparent that an improved economic situation in Prince Edward Island does not produce a major financial benefit to the Provincial Government itself.

The Equalization formula has been developed during a period of significant expansion in Provincial government services across the nation. The bulk of these services are social in nature involving education, welfare, health, care for the elderly, etc. The level of social services may be a factor determining population growth, as some claim that interprovincial migration is influenced by the relative level

of Provincial services. If this were true, then unilateral action by a Province to raise the level of its social services could result in a significant increase in dependence on Equalization. Concerns over potential population loss and the consequent impact on total Equalization payments may impede a movement towards more self-reliance. But there is no evidence that Provinces actually pursue policies of enhancing Equalization dependence.

The most dynamic aspect of Equalization over the years has stemmed from redefinitions of the formula from time to time. rather than from relative changes in the Province's economic circumstances. It now appears that the days of continuing upward movements in Equalization payments in constant dollars are drawing to a close. In fact Equalization payments for 1982/83 are forecast to have declined in real terms by 5 per cent. Growth of Equalization payments now depends on growth of Provincial revenues in the 5 Provinces used as the standard. This formula now excludes growth in the Province with the greatest potential for development in the country, Alberta. Perhaps more importantly, general economic conditions in Canada are restricting growth of Provincial government services. There are also indications that the relative role of Provincial governments in society is unlikely to continue to expand substantially. Over and above these considerations, there are no major Provincial revenue sources remaining outside the formula, so the room for potential gains from this direction are virtually gone. There are thus many reasons to believe that in future years we will see a more modest growth of Equalization payments to Prince Edward Island on a per capita basis. It will continue to be a major revenue source to the Province as long as income and resource deficiencies persist, and as such it is a major source of financial security for Prince Edward Island.